THE PENDING CLAIMS:

1. (Previously Presented) A process for depositing a low dielectric constant film, comprising reacting a cyclic organosiloxane with oxygen in the presence of RF power in a chamber at a pressure of between about 2.5 Torr and about 10 Torr, wherein the oxygen is introduced into the chamber at a flowrate less than or equal to the flowrate of the cyclic organosiloxane into the chamber, and wherein the low dielectric constant film comprises silicon, oxygen, and carbon.

2. (Original) The process of claim 1, wherein the cyclic organosiloxane is selected from the group consisting of 1,3,5,7-tetramethylcyclotetrasiloxane, octamethylcyclotetrasiloxane, 1,3,5,7,9-pentamethylcyclopentasiloxane, 1,3,5,7-tetrasilano-2,6-dioxy-4,8-dimethylene, 2,4,6-trisilanetetrahydropyran, and 2,5-disilanetetrahydrofuran.

3. (Original) The process of claim 1, wherein the cyclic organosiloxane is octamethylcyclotetrasiloxane.

4. (Original) The process of claim 1, wherein the oxygen is introduced into the chamber at a flowrate of about 100 sccm to about 200 sccm.

5. (Original) The process of claim 1, further comprising introducing a carrier gas into the chamber.

6. (Original) The process of claim 1, wherein a carrier gas is introduced into the chamber at a flow rate between about 0 sccm and about 1000 sccm.

7. (Previously Presented) A process for depositing a low dielectric constant film, comprising reacting a cyclic organosiloxane with oxygen in the presence of mixed frequency RF power in a chamber at a pressure of between about 2.5 Torr and about

10 Torr, wherein the oxygen is introduced into the chamber at a flowrate less than or equal to the flowrate of the cyclic organosiloxane into the chamber, and wherein the low dielectric constant film comprises silicon, oxygen, and carbon.

8. (Original) The process of claim 7, wherein the cyclic organosiloxane is selected from the group consisting of 1,3,5,7-tetramethylcyclotetrasiloxane, octamethylcyclotetrasiloxane, 1,3,5,7,9-pentamethylcyclopentasiloxane, 1,3,5,7-tetrasilano-2,6-dioxy-4,8-dimethylene, 2,4,6-trisilanetetrahydropyran, and 2,5-disilanetetrahydrofuran.

9. (Original) The process of claim 7, wherein the cyclic organosiloxane is octamethylcyclotetrasiloxane.

10. (Original) The process of claim 7, wherein the oxygen is introduced into the chamber at a flowrate of about 100 sccm to about 200 sccm.

11. (Original) The process of claim 7, wherein the mixed frequency RF power comprises a high frequency power of 13.56 MHz and a low frequency RF power of about 350 KHz to 1 MHz.

12. (Original) The process of claim 11, wherein the high frequency power is delivered at between about 10 W and about 1000 W and the low frequency power is delivered at between about 0 W and about 500 W.

13. (Original) The process of claim 11, wherein the high frequency power is delivered at between about 300 W and about 1000 W.

14. (Original) The process of claim 7, further comprising introducing a carrier gas into the chamber at a flowrate between about 0 sccm and about 1000 sccm.

15. (Previously Presented) A process for depositing a low dielectric constant film, comprising reacting octamethylcyclotetrasiloxane with oxygen in the presence of mixed frequency RF power in a chamber at a pressure of between about 2.5 Torr and about 10 Torr, wherein the oxygen is introduced into the chamber at a flowrate less than or equal to the flowrate of the octamethylcyclotetrasiloxane into the chamber, and the oxygen flowrate is less than or equal to about 200 sccm, and wherein the low dielectric constant film comprises silicon, oxygen, and carbon.

16. (Original) The process of claim 15, wherein the oxygen flowrate is about 100 sccm to about 200 sccm.

17. (Original) The process of claim 15, wherein the oxygen flowrate is about 100 sccm.

18. (Original) The process of claim 15, wherein the mixed frequency RF power comprises a high frequency power of 13.56 MHz and a low frequency RF power of about 350 KHz to 1 MHz.

19. (Original) The process of claim 18, wherein the high frequency power is delivered at between about 300 W and about 1000 W.

20. (Original) The process of claim 15, further comprising introducing a carrier gas into the chamber.